

# **SFOBB West Span BPM Path Feasibility and Environmental Public Workshop**

**Pier 1 – Bayside Room  
January 20, 2016**



Welcome!



# Workshop Agenda

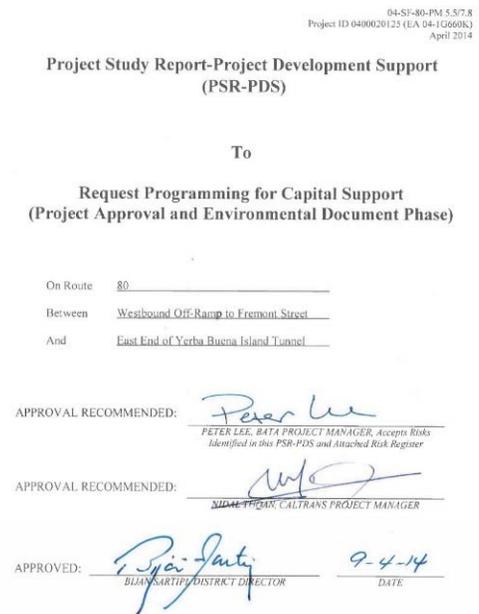


- Arrival (6:00)
- Presentation (6:10-6:45)
- General Q&A (6:45-7:00)
- Feedback Stations (7:00-7:40)
  - Project Process, Funding, and Environmental
  - San Francisco
  - Main Span
  - Yerba Buena Island (YBI)
- Station Reports (7:40-7:45)
- Adjourn (7:45)

# Previous Studies



- Feasibility Study (2002)



- PSR-PDS (2014)



# Project Goals

- Downtown San Francisco bicycle & pedestrian link to East Bay & Treasure Island
- Facilitate and not hinder Caltrans maintenance access
- Buildable and fundable alternative



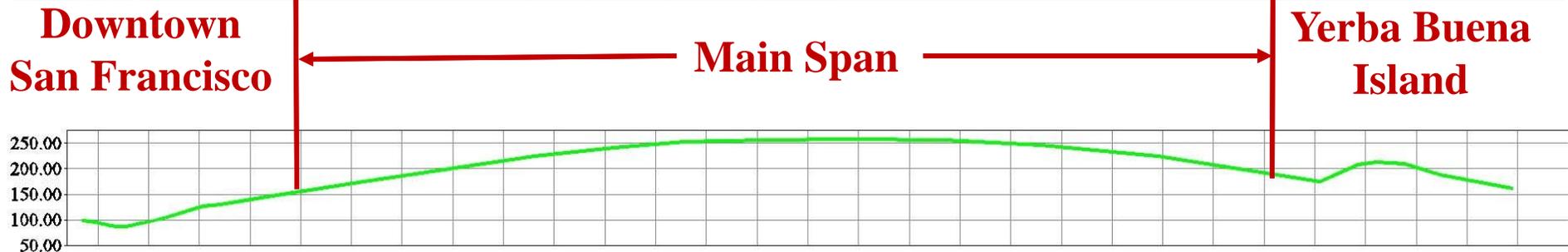
Affordable

Approvable

Inspiring

# Project Description

- San Francisco touchdown ~2500 feet or 1/2 mile
- Main Span 10,000 feet or ~ 2 miles
- YBI touchdown and path ~ 1/2 mile



# Project Benefits

- Transportation link from East Bay and Treasure Island to/from San Francisco.
- Connects to East Span Pathway (Bay Bridge Trail)
- Tourism, health and recreation
- Closure link for the Bay Trail
- Class 1 - Protected from vehicular traffic
- Accessible (ADA) – 5% or less continuous or 12H:1V w/landings



# Workshop Goals

- Project information and process
- Feedback on initial alternatives
- How will you use the path?
- Where should the path connect?
- Features and Amenities
- Suggestions or Concerns



# Pathway Options



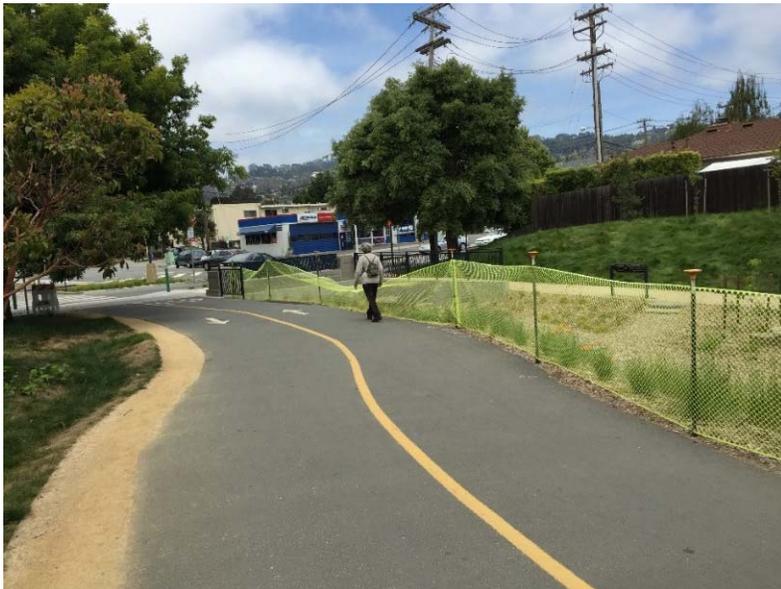
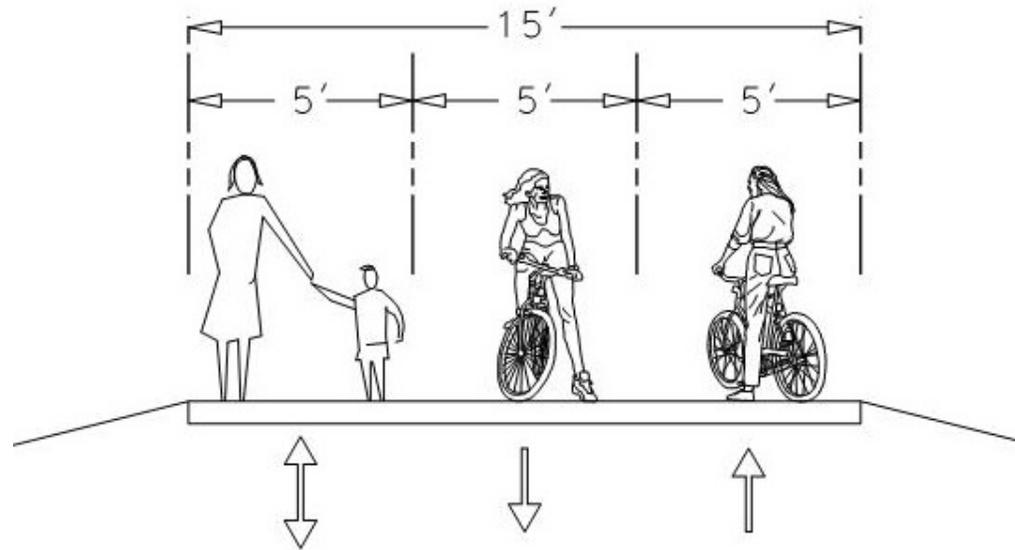
# The Distance



- How far and how long?

Pathway Segments	Length (miles)	 (mins)	 (mins)
<b>BPM Pathway</b>	<b>2.9</b>	<b>17</b>	<b>57</b>
SF Approach	0.5		
Main Span (West)	2.0		
YBI Approach and Path	0.4		
<b>Bay Bridge Trail</b>	<b>4.4</b>	<b>26</b>	<b>88</b>
East Span	2.3		
Approach	1.1		
Emeryville(Shellmound)	1.0		
<b>Total Bay Bridge Trail &amp; Pathway</b>	<b>7.3</b>	<b>44</b>	<b>145</b>

# Pathway Section



Ohlone Greenway: El Cerrito

# Pathway Width



East Span 15½'



Golden Gate: 10' max



Tilikum Crossing 2 x 14'



Brooklyn 8' to 16'

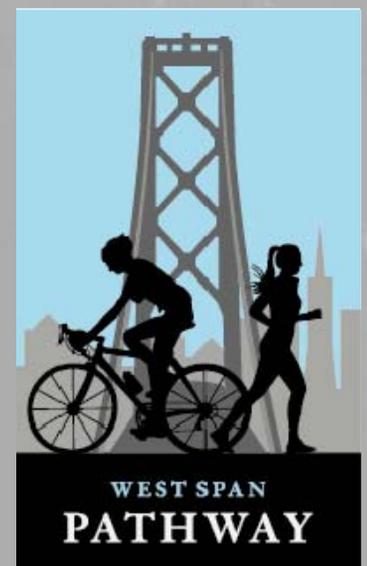


# Amenities

- Benches
- Look Out
- Lighting
- Safety/ Call Boxes
- Wayfinding
- Interpretive Displays

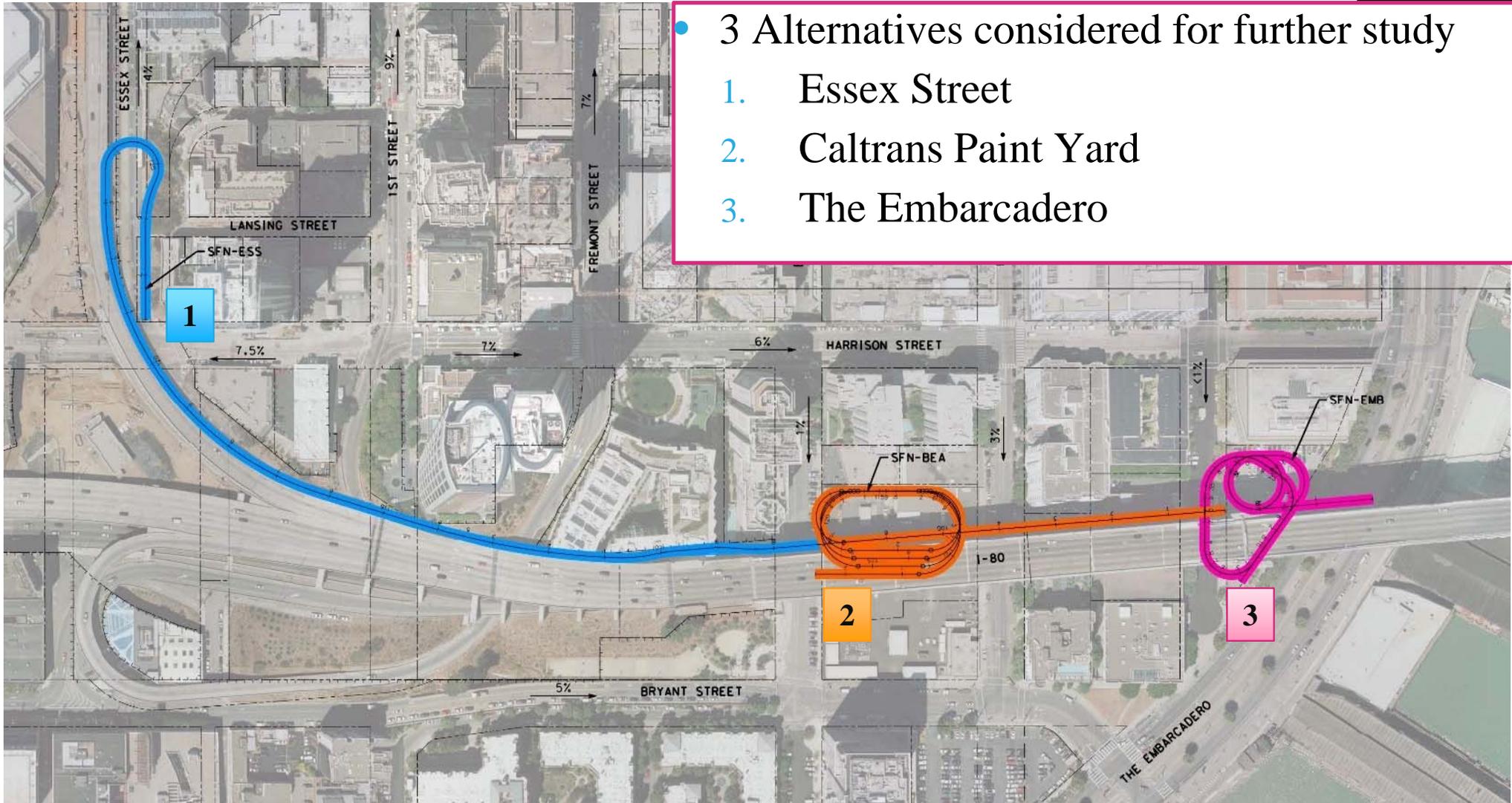


# San Francisco Landing Options





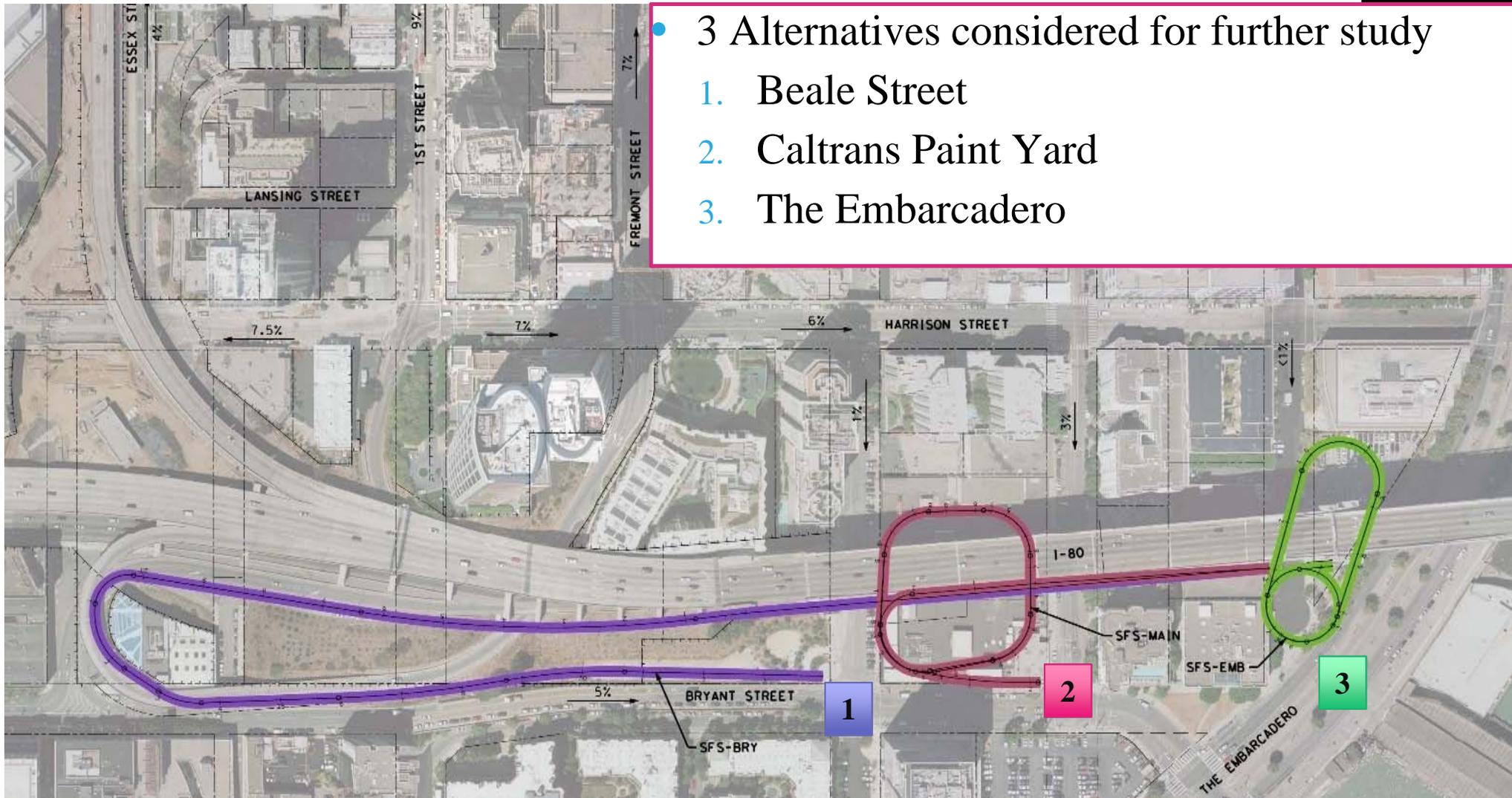
# Downtown SF North Approaches



# Downtown SF South Approaches

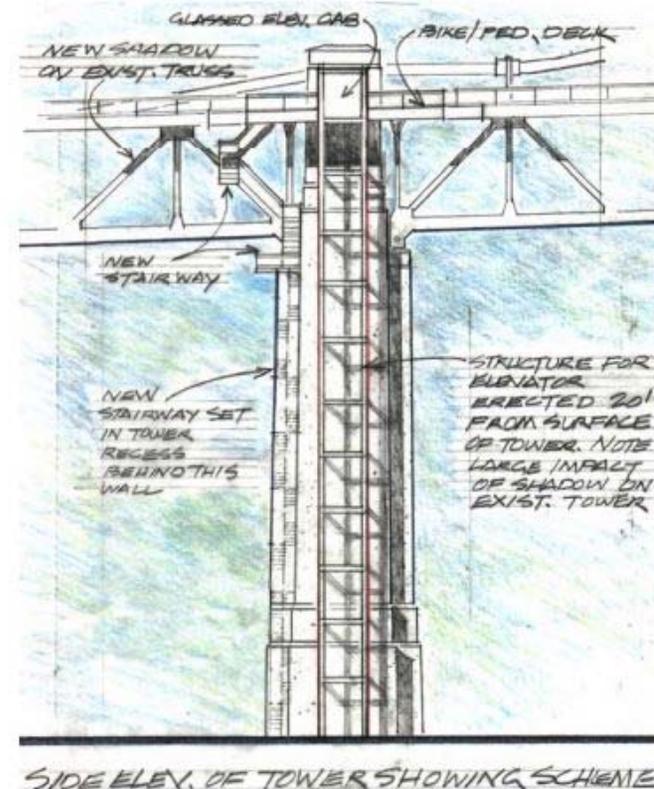
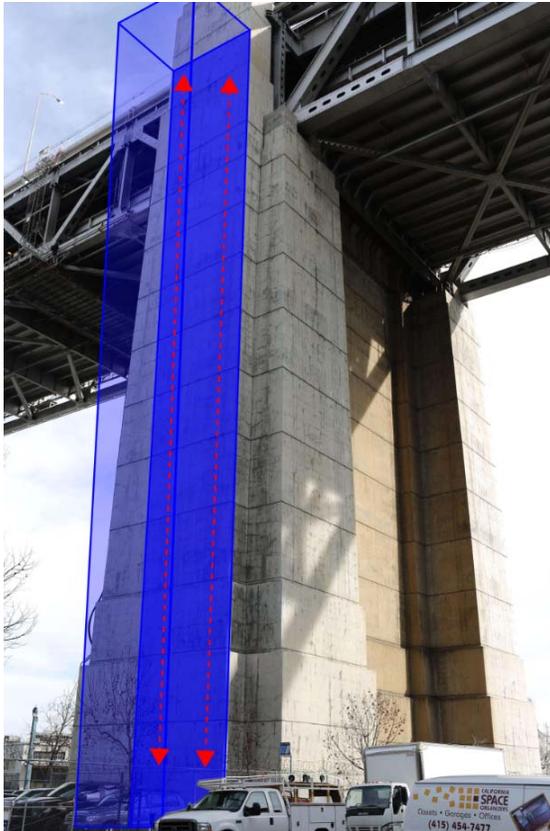
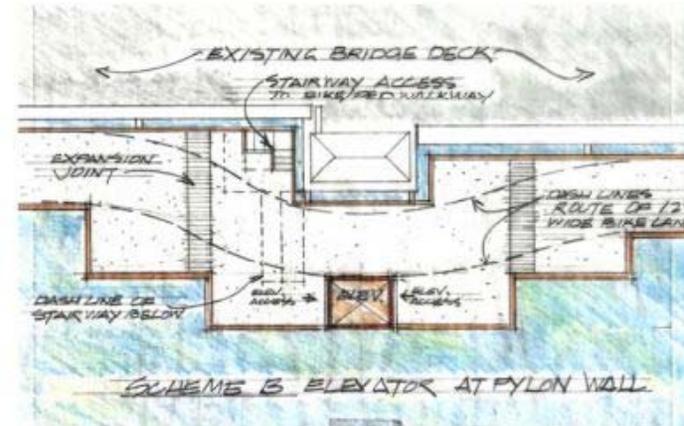


- 3 Alternatives considered for further study
  1. Beale Street
  2. Caltrans Paint Yard
  3. The Embarcadero



# Elevator Option

- At Pier W1 – touchdown just west of Embarcadero
- Elevator Only Option – no ramps
- Dual High Speed – high capacity



# Essex Street Landing



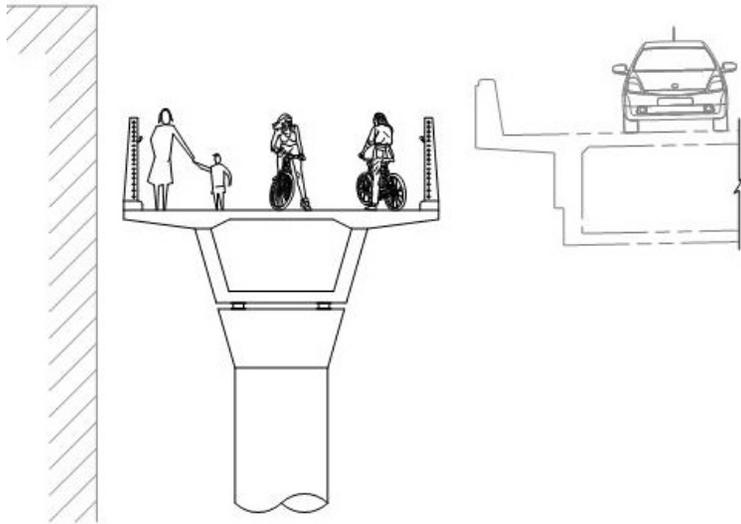
# Paint Yard Landing



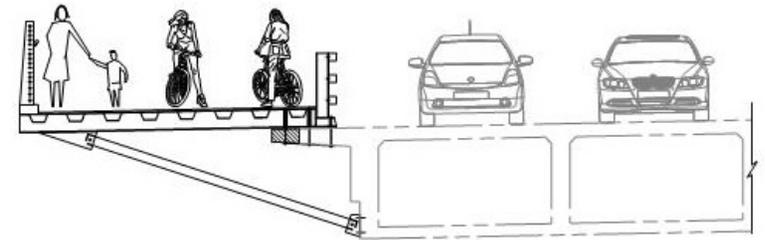
# Embarcadero Landing



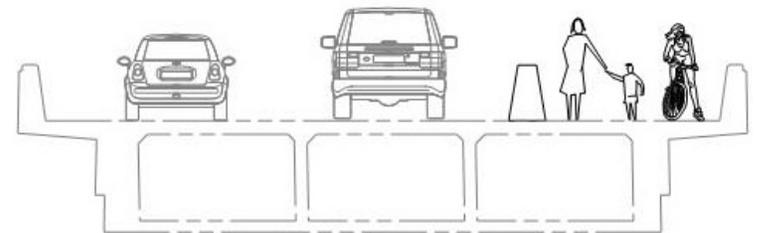
# San Francisco Path Options Cross-Sections



Stand-alone

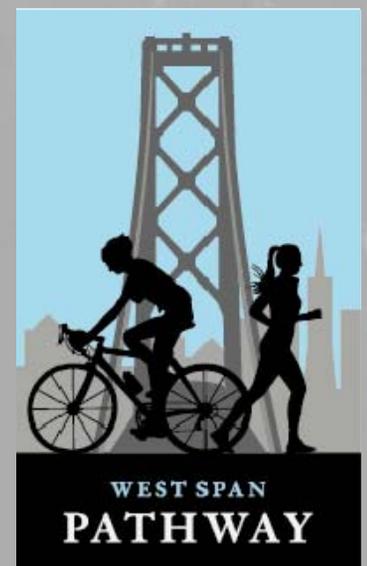


Attach to Existing



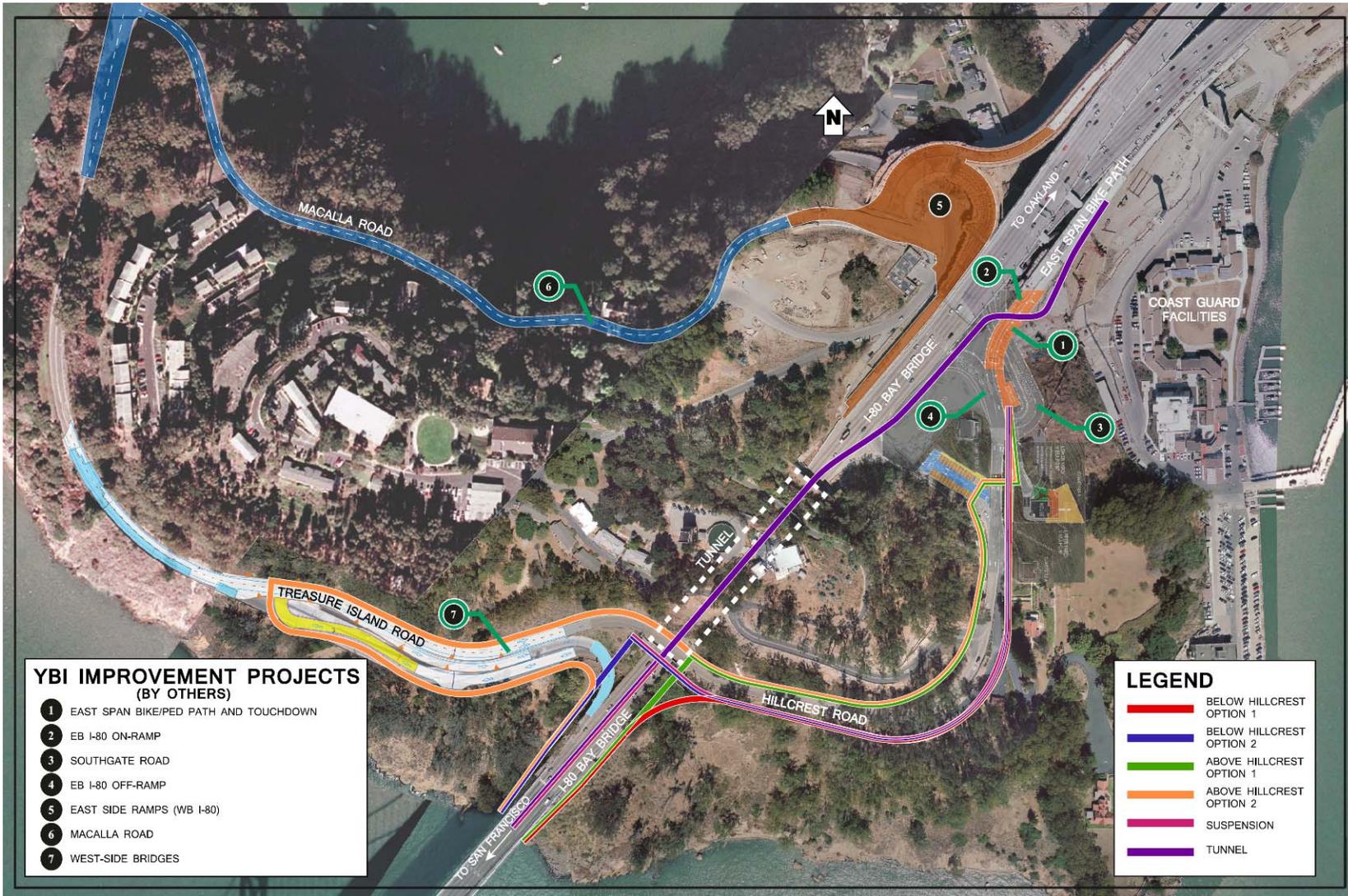
On-deck

# Yerba Buena Island Options



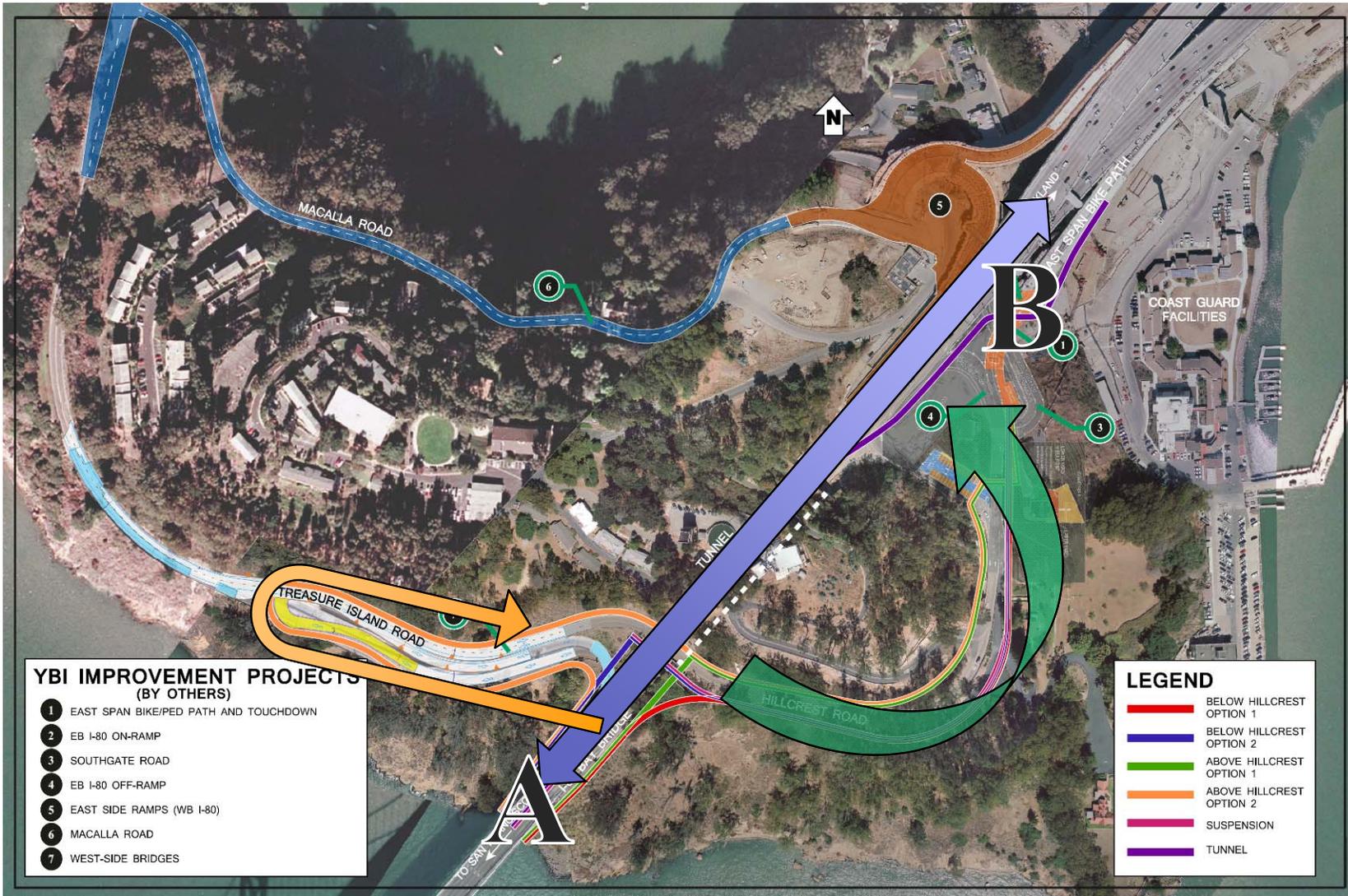
# YBI Options

- Interface with ongoing projects



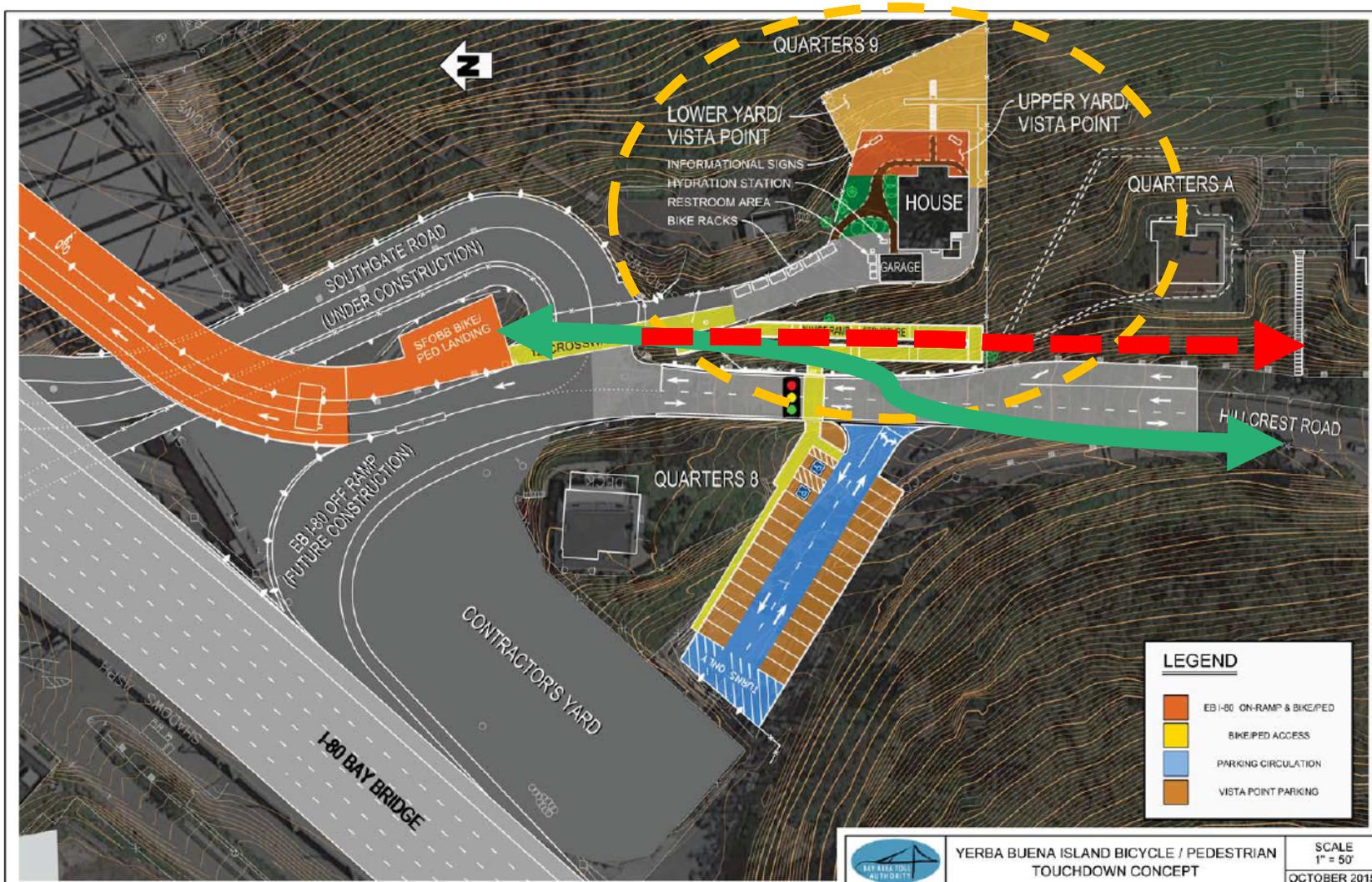
# YBI Options

- 6 major options



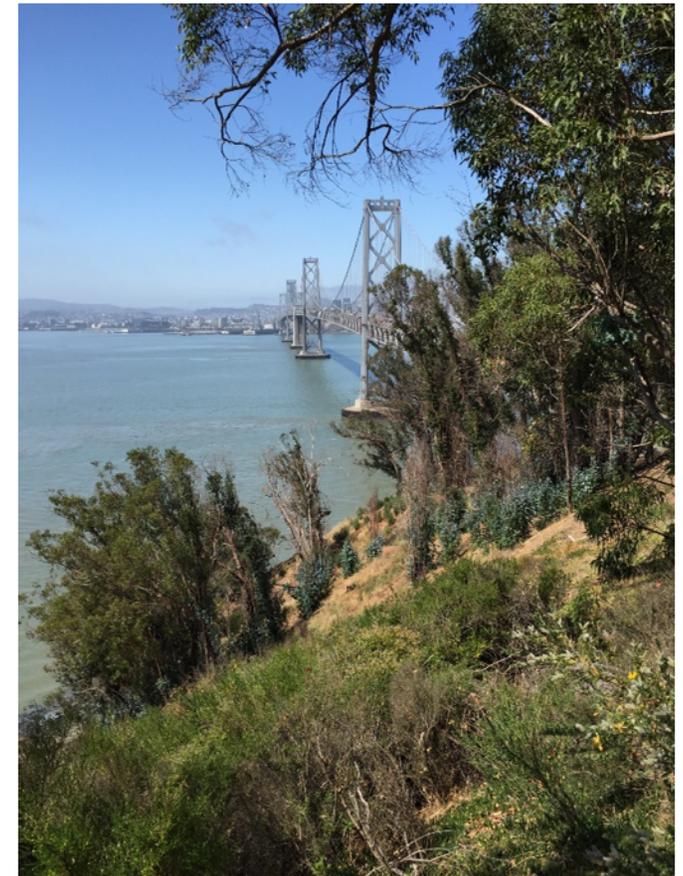
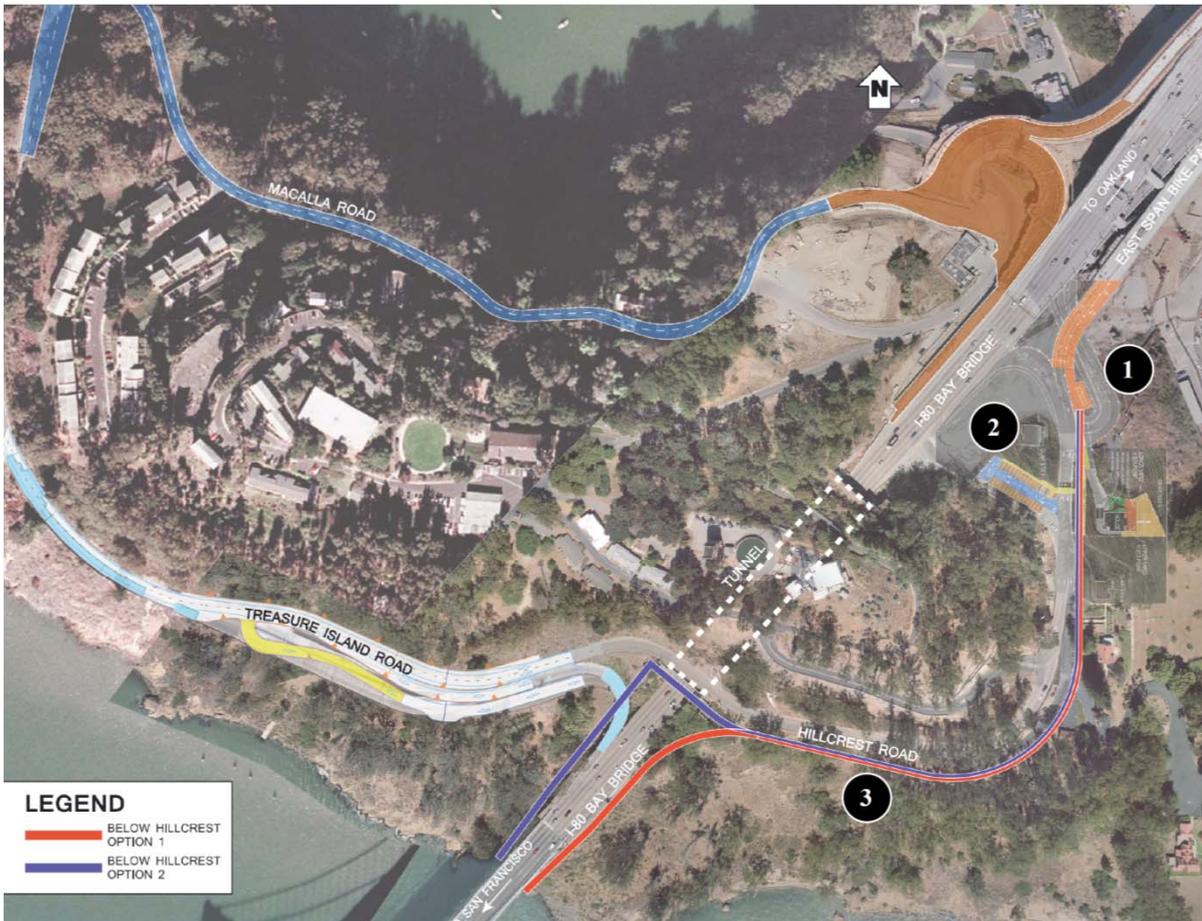
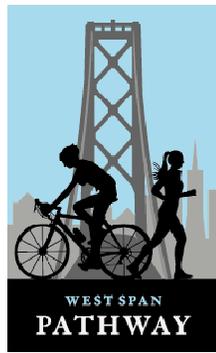
# YBI - East Bike/Ped Vista Point

- Connection from East Span Trail
- Vista Point w/bathrooms, water, bike racks, signage/info



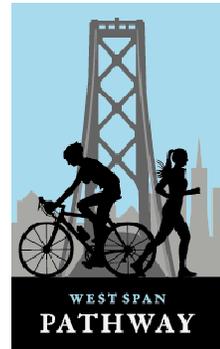
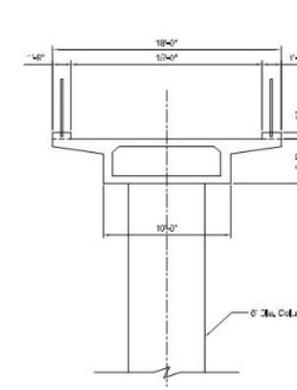
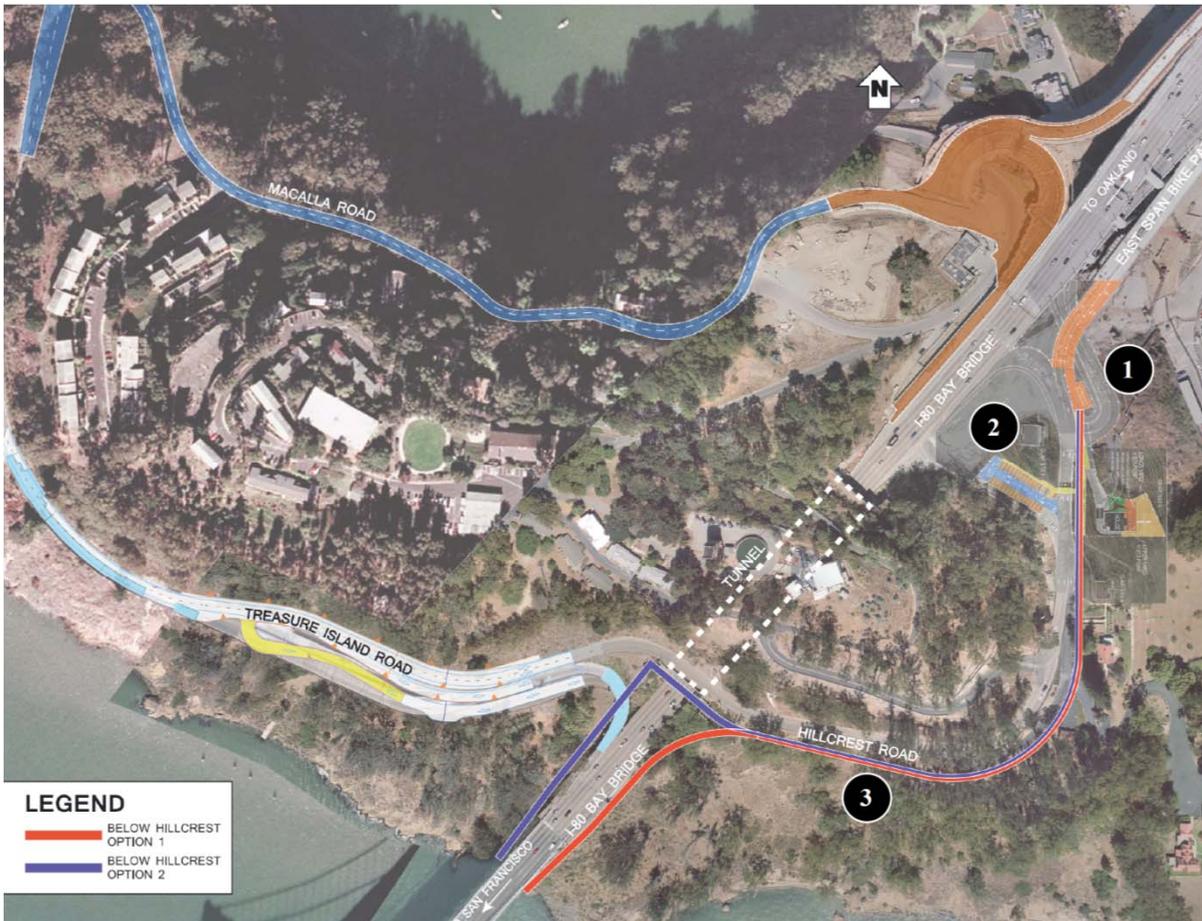
# YBI – Below Hillcrest-1

- Cut or retained fill with some structures
- Interference with Cost Guard Access

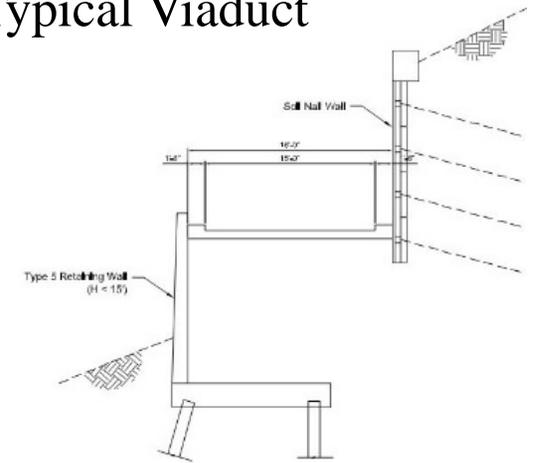


# YBI – Below Hillcrest-2

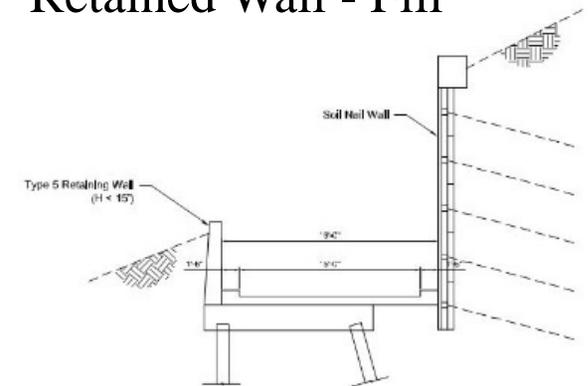
- Cut or retained fill with some structures
- Steep terrain and slopes



Typical Viaduct



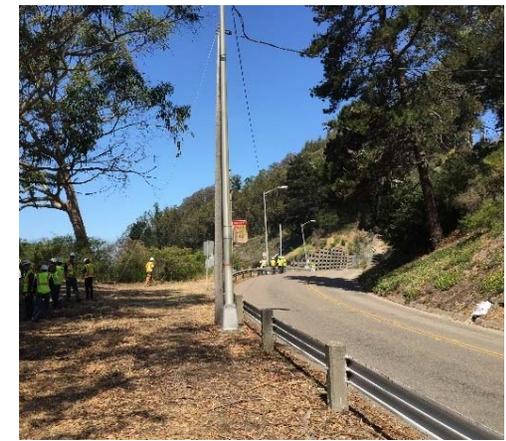
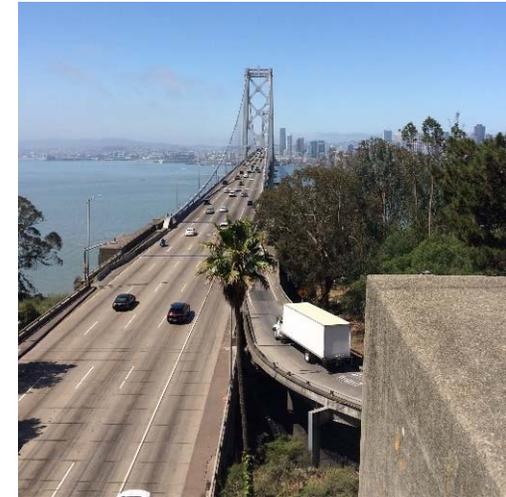
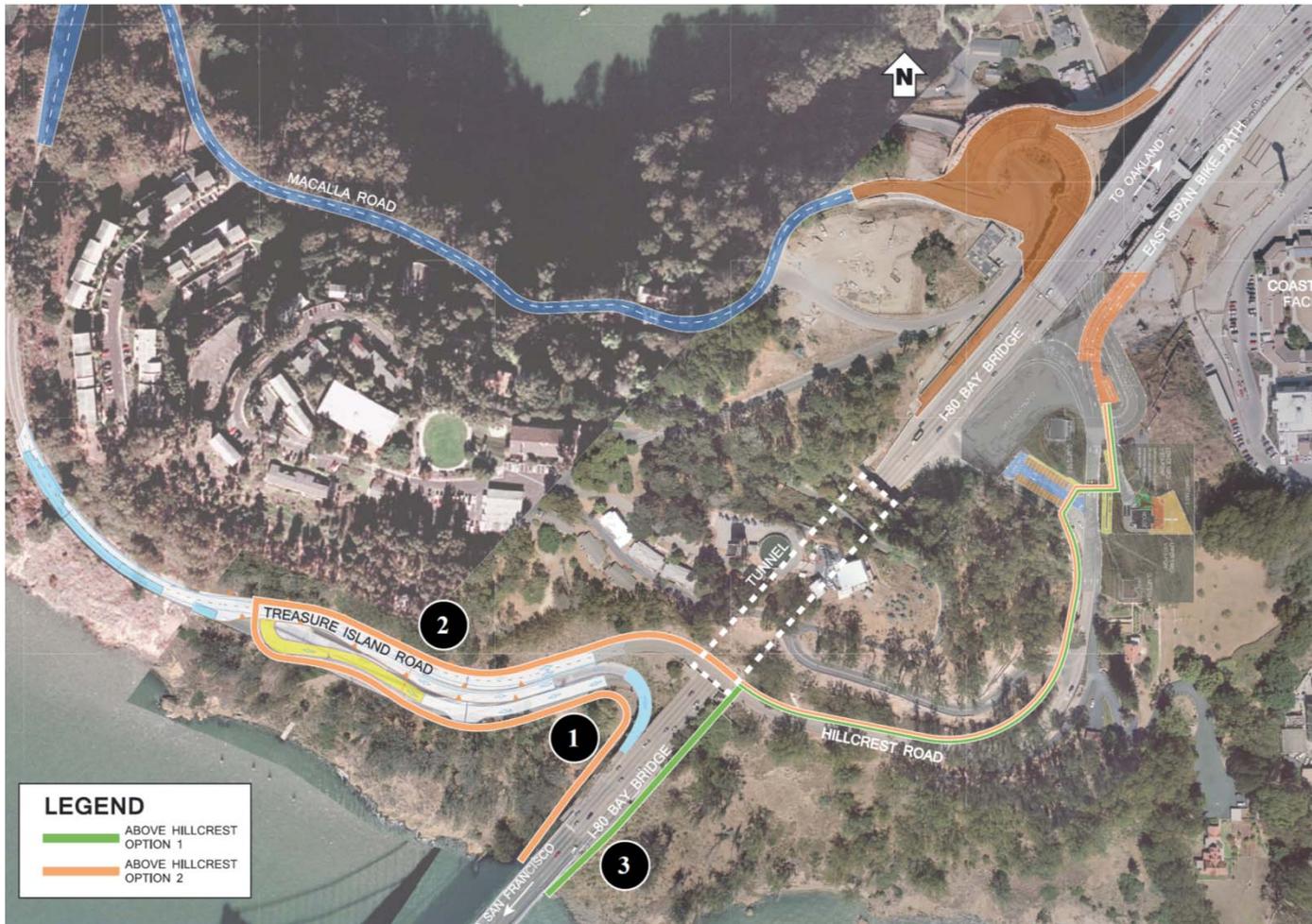
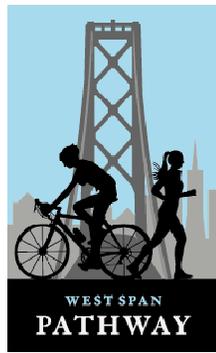
Retained Wall - Fill



Retained Wall - Cut

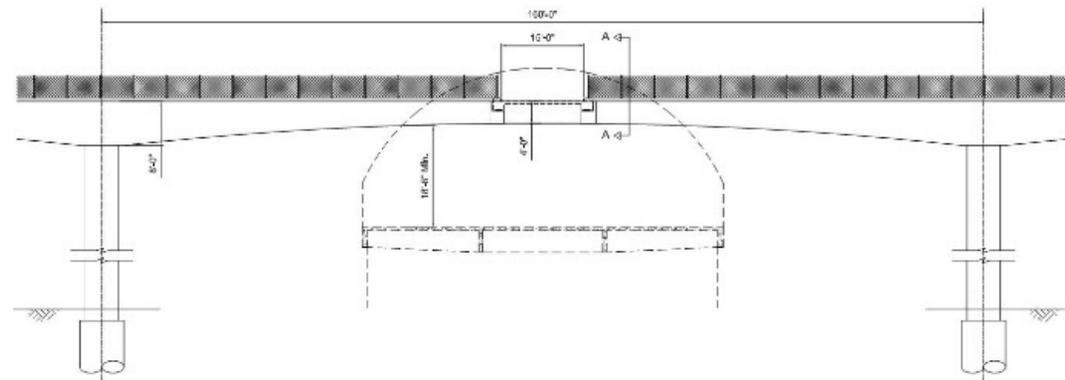
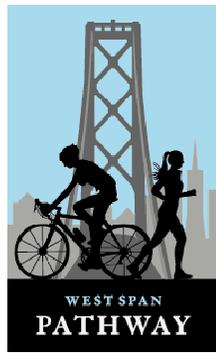
# YBI – Above Hillcrest – N/S

- Cut or retained fill above Hillcrest (to inside)
- North option – use of west side ramps



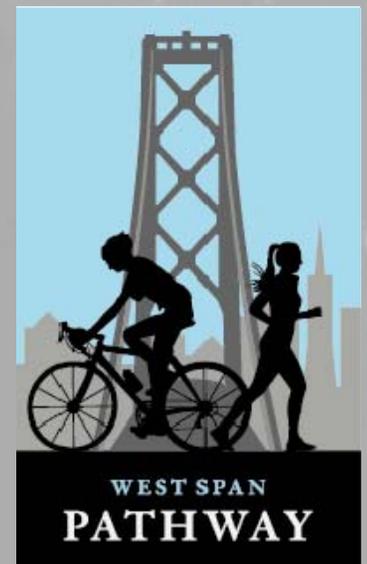
# YBI – Suspended & Tunnel Options

- Tie-in to Main Span Suspended Option
- Option to continue through crown of existing tunnel



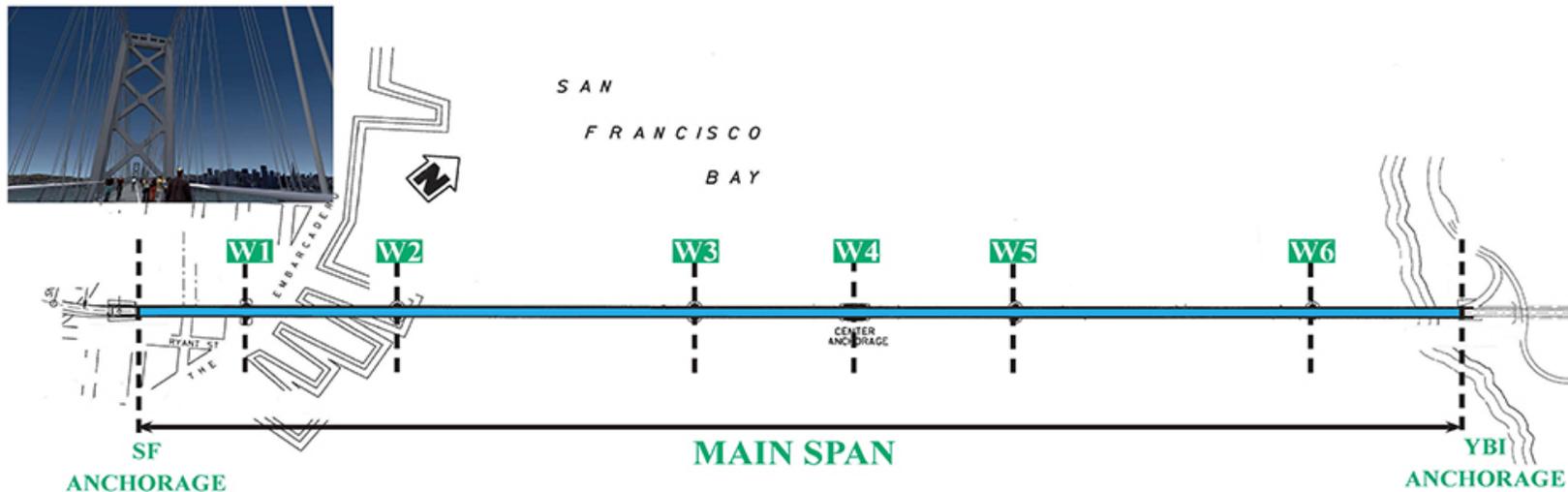
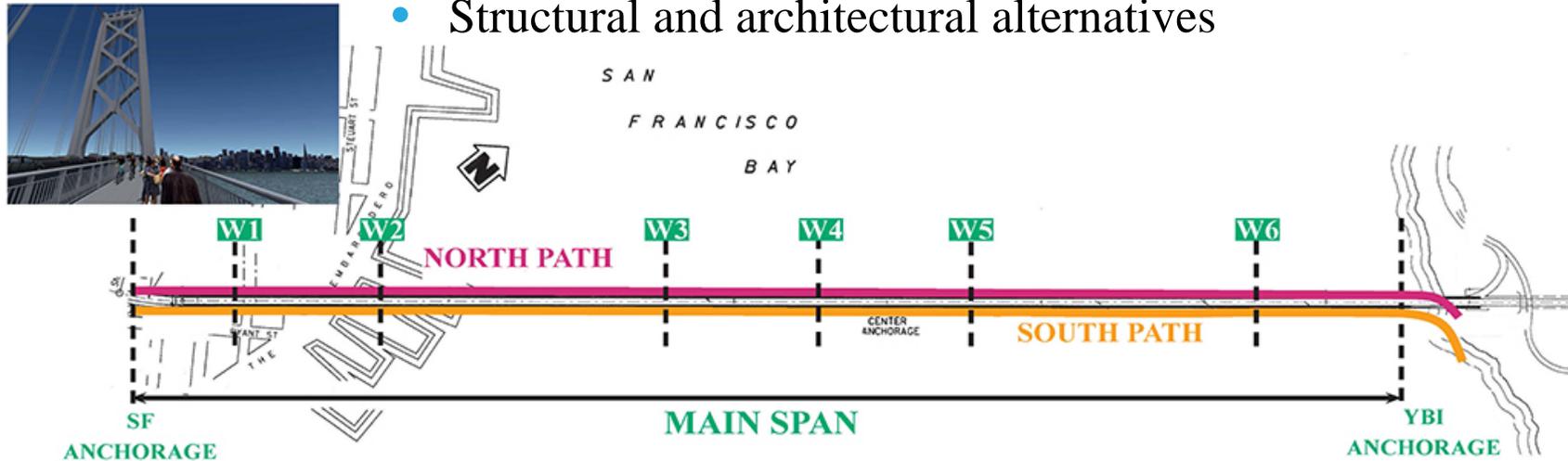
Suspended Path at West Portal

# Main Span Options



# Main Span Alignments

- North or South Options; similar alignments
- Suspended Elevated Deck Option
- Structural and architectural alternatives



# North or South

Do you prefer the path on the north or south side of the bridge?



# Propped Cantilever Options



# Cantilever Beam w/Moment Connection



# Pinned Boomerang Deck



Extended Alternate



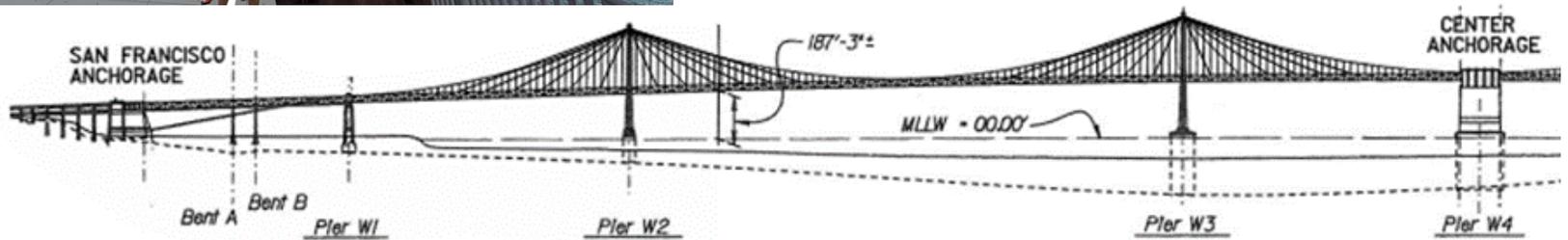
# Outboard Deck w/Existing Suspension Cable



# Deck Uplift w/stay cables



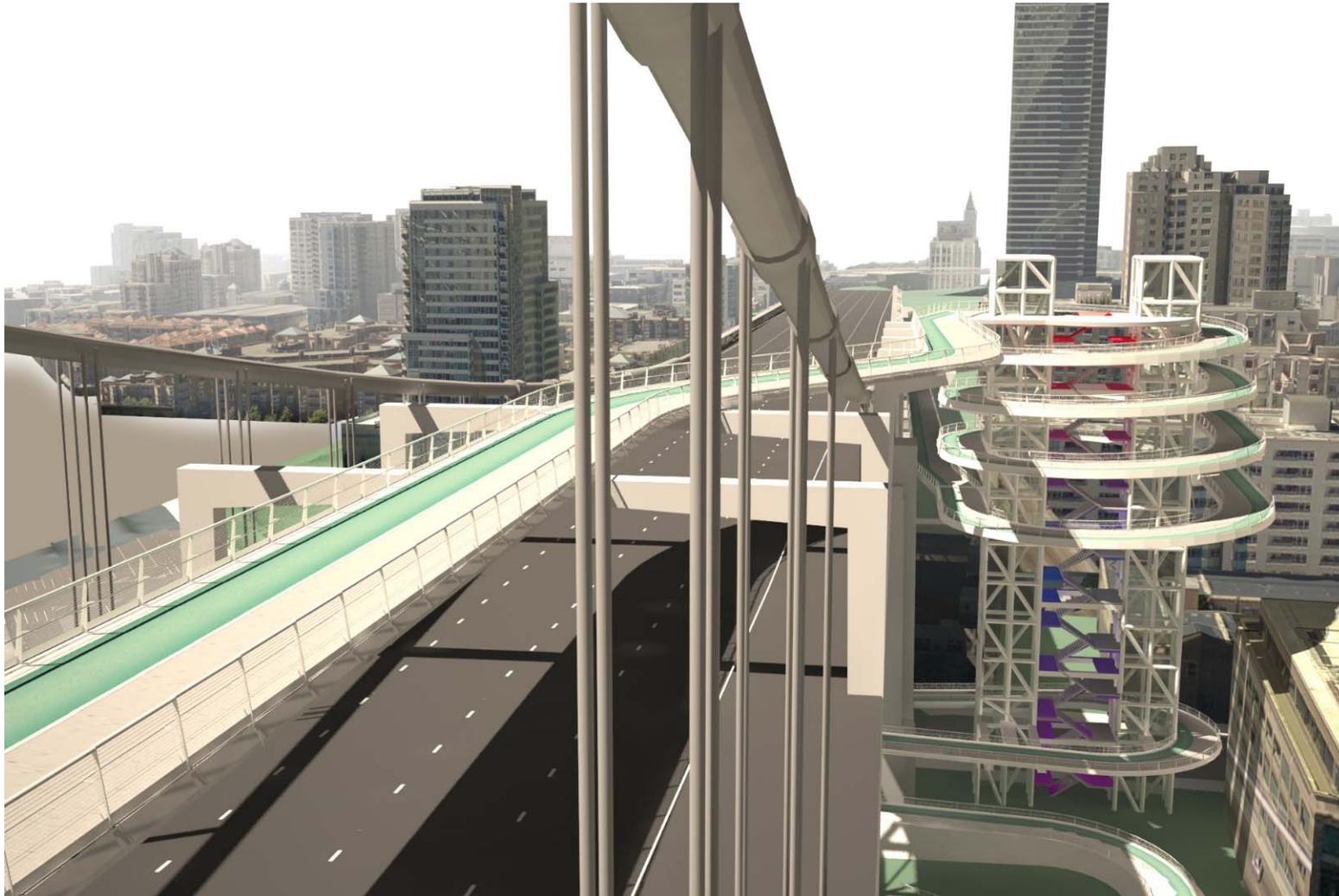
Tamar Bridge Path Addition



# Suspended Elevated Deck

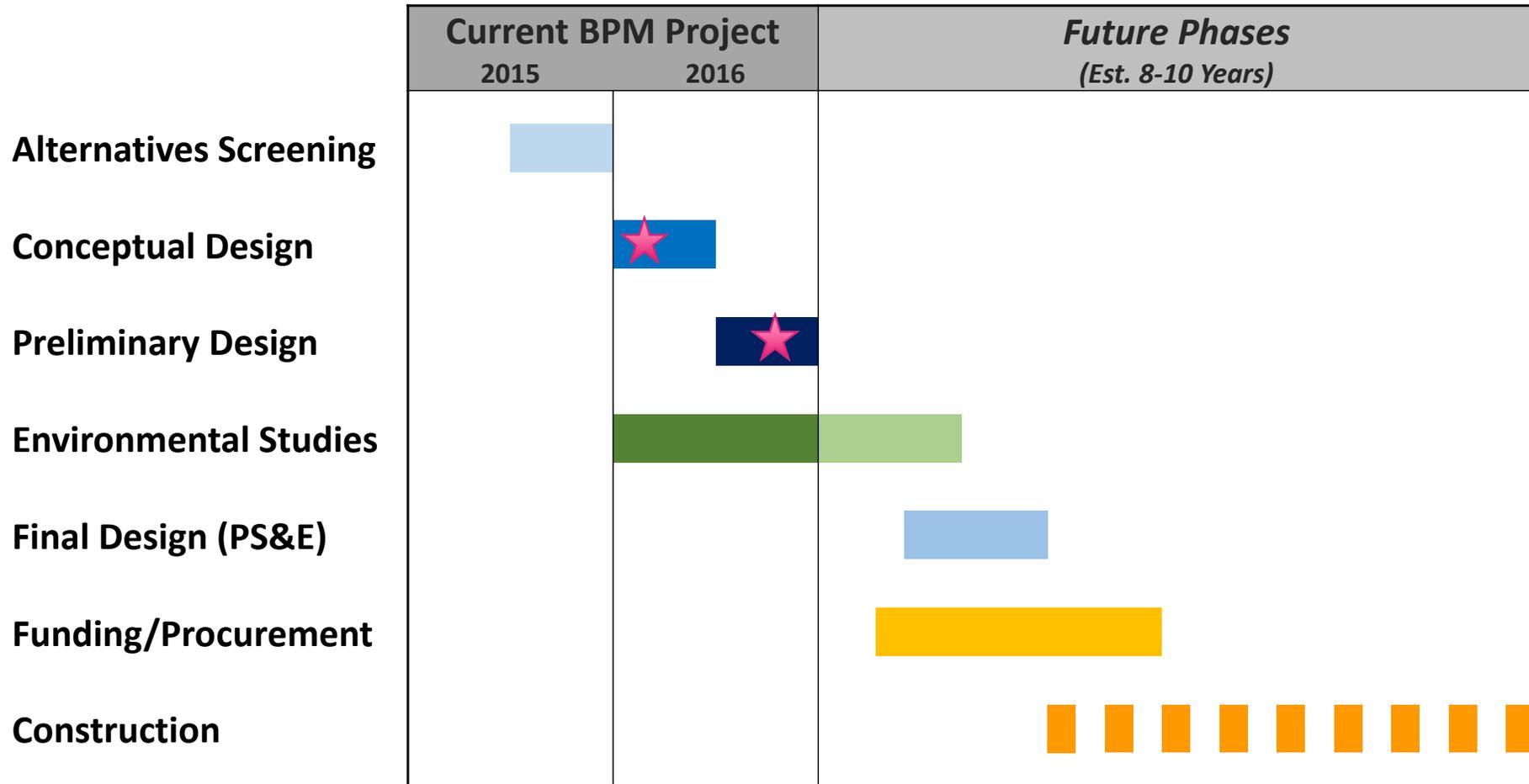


# Suspended Elevated Deck



# Project Timeline

- Funding required to advance design and construction



★ Public Workshops

# Agenda – Q&A



- Arrival (6:00)
- Presentation (6:10-6:45)
- **General Q&A (6:45-7:00)**
- Feedback Stations (7:00-7:40)
  - Project Process and Environmental
  - San Francisco
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- Station Reports (7:40-7:45)
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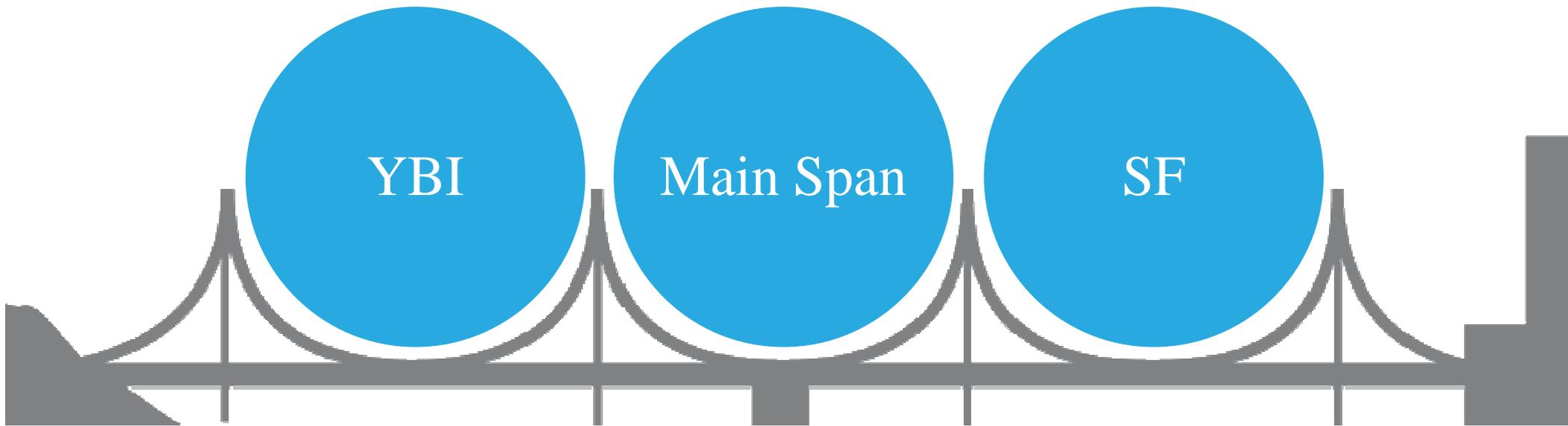
# Breakout Stations



- Arrival (6:00)
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- General Q&A (6:45-7:00)
- **Feedback Stations (7:00-7:40)**
  - **Project Process and Environmental**
  - **San Francisco**
  - **Main Span**
  - **Yerba Buena Island (YBI)**
- Station Reports (7:40-7:45)
- Adjourn (7:45)

# Summary of Breakouts

- Project Overview and Planning
- San Francisco Touchdown
- Main Span
- Yerba Buena Island



# Next Steps

- Evaluate Feedback – inform design process
- Conceptual design and initial cost estimates
- 2<sup>nd</sup> Workshop – Fall 2016
- Complete Environmental Studies
- Final Design
- Funding
- Construction



Thank you!